Pending Claims

This listing of claims reflects the claims currently pending in the present application.

1. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic or cationic carrier~~,~~;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination; and

a bio-compatible enclosing means for enclosing said carrier/active agent combination, said enclosing means including at least one outwardly directed surface having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent.

2. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination; and

a bio-compatible, biodegradable enclosing means for enclosing said carrier/active agent combination, said enclosing means including at least one outwardly directed side.

3. (Previously presented) The bio-compatible product in accordance with claim 2, wherein said bio-compatible, biodegradable enclosing means has a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent.

4. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the carrier is an anionic carrier.

5. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the active agent is a cationic agent.

6. (Previously presented) The bio-compatible product in accordance with claim 5, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents and hemostatic agents.

7. (Previously presented) The bio-compatible product in accordance with claim 4, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

8. (Previously presented) The bio-compatible product in accordance with claim 7, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

9. (Previously presented) The bio-compatible product in accordance with claim 8, wherein the active agent is a cationic agent.

10. (Previously presented) The bio-compatible product in accordance with claim 9, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants,

antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents.

11. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the enclosing means is a polymer film.

12. (Previously presented) The bio-compatible product in accordance with claim 11, wherein said polymer is a microporous polymer having a pore size of between 0.01 and 1000 microns.

13. (Previously presented) The bio-compatible product in accordance with claim 12, wherein said microporous polymer has a pore size of between 0.1 and 500 microns.

14. (Previously presented) The bio-compatible product in accordance with claim 13, wherein said microporous polymer has a pore size of between 0.1 and 50 microns.

15. (Previously presented) The bio-compatible product in accordance with claim 14, wherein said microporous polymer has a pore size of between 0.1 and 5 microns.

16. (Previously presented) The bio-compatible product in accordance with claim 15, wherein said microporous polymer has a pore size of between 0.1 and 1 microns.

17. (Previously presented) The bio-compatible product in accordance with claim 1, wherein the enclosing means is a polymer film selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

18. (Previously presented) The bio-compatible product in accordance with claim 2, wherein the carrier is an anionic carrier.

19. (Previously presented) The bio-compatible product in accordance with claim 18, wherein the active agent is a cationic agent.

20. (Previously presented) The bio-compatible product in accordance with claim 19, wherein the active agent is ~~a~~ selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents.

21. (Previously presented) The bio-compatible product in accordance with claim 20, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

22. (Previously presented) The bio-compatible product in accordance with claim 21, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

23. (Previously presented) The bio-compatible product in accordance with claim 22, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents and hemostatic agents.

24. (Previously presented) The bio-compatible product in accordance with claim 2, wherein the enclosing means is a polymer selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

25. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic carrier which is an oxidized regenerated cellulose fabric;

a cationic pharmaceutically active agent which is ionically linked to said carrier, thereby forming a carrier/active agent combination; said cationic pharmaceutically active agent being selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs, growth factors and hemostatic agents.and

a bio-compatible enclosing means for enclosing said carrier/active agent combination, said enclosing means being made from a polymer selected from the group consisting of polyethylene, polypropylene, mixtures thereof and copolymers of the constituent monomers thereof, said enclosing means including at least one outwardly directed surface having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent.

26. (Previously presented) The bio-compatible product in accordance with claim 25, wherein the enclosing means is a microporous polymer film.

27. (Previously presented) The bio-compatible product in accordance with claim 3, wherein the enclosing means is a microporous polymer film.

28. (Previously presented) The bio-compatible product in accordance with claim 27, wherein the carrier is an anionic carrier.

29. (Previously presented) The bio-compatible product in accordance with claim 28, wherein the active agent is a cationic agent.

30. (Previously presented) The bio-compatible product in accordance with claim 29, wherein the active agent is selected from the group consisting of cationic analgesics, antibiotics, antimicrobials, antivirals, anti-inflammatory agents, anticholinergics, antidepressants, antihistamines, antidiabetics, anticonvulsants, antimigraines, antineoplastics, antimalarials, immunosuppressants, cardiovascular drugs and hemostatic agents.

31. (Previously presented) The bio-compatible product in accordance with claim 28, wherein the anionic carrier is an oxidized regenerated cellulose carrier.

32. (Previously presented) The bio-compatible product in accordance with claim 31, wherein the anionic carrier is an oxidized regenerated cellulose fabric.

33 (Previously presented) The bio-compatible product in accordance with claim 32, wherein the active agent is a cationic agent.

34. (Previously presented) The bio-compatible product in accordance with claim 27, wherein said microporous polymer has a pore size of between 0.01 and 1000 microns.

35. (Previously presented) The bio-compatible product in accordance with claim 34, wherein said microporous polymer has a pore size of between 0.1 and 500 microns.

36. (Previously presented) The bio-compatible product in accordance with claim 35, wherein said microporous polymer has a pore size of between 0.1 and 50 microns.

37. (Previously presented) The bio-compatible product in accordance with claim 36, wherein said microporous polymer has a pore size of between 0.1 and 5 microns.

38. (Previously presented) The bio-compatible product in accordance with claim 37, wherein said microporous polymer has a pore size of between 0.1 and 1 microns.

39. (Previously presented) The bio-compatible product in accordance with claim 3, wherein said enclosing means is made from a polymer selected from the group consisting of PLA, PLG, mixtures thereof and copolymers of the constituent monomers thereof.

40. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination;

a bio-compatible enclosing means for enclosing said carrier/active agent combination, said enclosing means including at least one outwardly directed surface having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent; and

a further carrier layer located on said at least one outwardly directed surface of said enclosing means.

41. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination;

a bio-compatible, biodegradable enclosing means for enclosing said carrier/active agent combination, said enclosing means including at least one outwardly directed side; and

a further carrier layer located on said at least one outwardly directed side of said enclosing means.

42. (Previously presented) A bio-compatible product for delivery of a pharmaceutically active agent to a patient in need of same, comprising:

a bio-compatible, biodegradable anionic or cationic carrier;

a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination;

a bio-compatible, biodegradable enclosing means for enclosing said carrier/active agent combination, said enclosing means including at least one outwardly directed side and having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent; and

a further carrier layer located on said at least one outwardly facing surface of said enclosing means.

43. (Previously presented) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed surface having a predetermined permeation gradient for the passage therethrough of said at least one pharmaceutically active agent, said administration of said pharmaceutically active agent being dependent on the permeablility of said enclosing means.

44. (Previously presented) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible, biodegradable enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed side, said administration of said pharmaceutically active agent being dependent on the rate of bio-degradability of the enclosing means.

45. (Previously presented) A method of administering a pharmaceutically active agent to the tissue surface of a subject in need of same, comprising the step of contacting said tissue surface with a bio-compatible delivery product having a bio-compatible, biodegradable anionic or cationic carrier, a pharmaceutically active agent which is cationic when the carrier is anionic and is anionic when the carrier is cationic, wherein said active agent is ionically linked to said carrier, thereby forming a carrier/active agent combination, said carrier being disposed within a bio-compatible, biodegradable enclosing means for enclosing said carrier/active agent combination having at least one outwardly directed side, said bio-compatible, biodegradable enclosing means having a predetermined permeation gradient for the passage therethrough of said pharmaceutically active agent, said administration of said pharmaceutically active agent being dependent on the rates of bio-degradability and permeability of the enclosing means.